

**REMARKS**

Applicants have amended claims 7, 10, and 11 and added new claims 16-19 to more appropriately claim the invention. Claims 7-19 are pending.

Applicants thank Examiner Brock for the courtesy extended to Applicants' representative, Timothy Hsieh, during the examiner interview conducted on June 17, 2003.

In the final Office Action, the Examiner rejected claims 7-15 under 35 U.S.C. § 103(a) as unpatentable over Applicants' admitted prior art in view of U.S. Patent No. 5,627,094 to Chan et al. and U.S. Patent No. 5,777,355 to Possin et al.

Claims 7 and 11 recite a method for forming a high fill factor image array and a high fill factor image array, respectively, including, *inter alia*, depositing a second passivation layer that suppresses lateral leakage current and depositing a continuous layer of i a-Si disposed on the second passivation layer.

As discussed during the examiner interview, neither Applicants' admitted prior art nor Chan et al. disclose or suggest depositing a second passivation layer that suppresses lateral leakage current and depositing a continuous layer of i a-Si disposed on the second passivation layer. Applicants' admitted prior art discloses a conventional full fill factor image array having only a single passivation layer shown as layer 56 in Fig. 2.

Chan et al. relates to stacked container capacitors and discloses a second dielectric layer (22) shown as 22a' in Fig. 2f. Chan et al. further disclose that another dielectric layer 32a in Fig. 2f resides over the second dielectric layer 22a' (col. 11, lines 18-22). Thus, Chan et al. fail to disclose or suggest depositing a continuous layer of i a-

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Si disposed on the second passivation layer as recited in claims 7 and 11 of the present invention.

Possin et al. fails to address this deficiency. This reference also fails to disclose or suggest a second passivation layer to suppress lateral leakage current and depositing a continuous layer of i a-Si disposed on the second passivation layer. Moreover, Possin et al. does not relate to high fill factor image arrays, but to conventional photosensitive elements.

Applicants also maintain their argument that Chan et al. is non-analogous art and that, even assuming, *arguendo*, that Chan et al. is analogous art, the requisite motivation to combine does not exist. In the final Office Action, the Examiner failed to address Applicants' arguments supporting their assertion that the requisite motivation to combine the references does not exist. Applicants respectfully request the Examiner provide the requisite objective reasoning for combining the references. *See Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims under 35 U.S.C. § 103(a). Applicants submit that claims 7 and 11 are in condition for allowance, as are claims 8-10 and 12-15 at least by virtue of their dependency from allowable claims 7 and 11.

Claim 16 recites a method to form a high fill factor image array that, among other things, includes depositing a second passivation layer over a first passivation layer to suppress lateral leakage current and depositing sensor material comprising a continuous layer of i a-Si over the collection electrode and at least a portion of the second passivation layer. As discussed above, none of the cited references disclose

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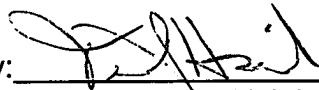
depositing a second passivation layer over the first passivation layer and depositing sensor material comprising a continuous layer of i a-Si over the collection electrode and at least a portion of the second passivation layer. Thus, Applicants submit that claim 16 is in condition for allowance, as are claims 17-19 at least by virtue of their dependency from allowable claim 16.

If there is any fee due in connection with the filing of this Preliminary Amendment, please charge the fee to our Deposit Account No. 24-0037.

Respectfully submitted,

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Dated: July 1, 2003

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